

Data Sheet: Copper CuCPⁱ

Chemical Composition

Element	CuCP
Percentage	>99.95

Properties

Heat treated

Property	Yield strength R _p 0.2 % [MPa] ⁱⁱ	Ultimate tensile strength R _m [MPa] ⁱⁱ	Elongation at Break [%] ⁱⁱ	Conductivity IACS (ASTM E1004-17)
Value	110-150	220-230	>36	up to 100%

As manufactured

Property	Yield strength R _p 0.2 % [MPa] ⁱⁱ	Ultimate tensile strength R _m [MPa] ⁱⁱ	Elongation at Break [%] ⁱⁱ	Conductivity IACS (ASTM E1004-17)
Value	165-200	235-255	>30	up to 100%

Tolerances

Property	Value as built	Unit
Achievable Part Accuracy ⁱⁱⁱ	+/- 0.3 mm for parts up to 100 mm +/- 0.3 % for parts beyond 100 mm	mm/%
Min. Wall thickness	1.0	mm

ⁱ The data from finished parts can deviate from above values depending on the manufacturing process and the component geometry. The data represents our present empirical values. It is incumbent on the person placing the order to examine whether it is suitable for its intended purpose, before using the product. The default postprocessing for this material is support removal and blasting.

ⁱⁱ Depending on build direction

ⁱⁱⁱ As a result of the part's geometry, strong tensions may cause distortion in the part which may lead to greater deviation.